

Approximation Method for the Calculation of Optical
Anisotropies of Macromolecules, by T. M. Birshteyn,
M. V. Vol'kenshteyn, et al, 12 pp.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, No 5, 1962, pp 670-677. 9224831
AEC-ANL-Tr-58

Sci-Phys
Oct 64

267,845

Synthesis of Polyferroorganosiloxanes and
Polyferrocenylorganosiloxanes, by K. A. Andrianov
T. M. Gmina, 9 pp.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol. IV, No 5, 1962, pp 678-682.

Invy Tr 3290/NHL 320

Sol - China
Jan 63

219,887

Chromatographic Method of Fractionation.

1. Modified Column for the Fractionation
of Polymers, by O. G. Zaretskaya, P. S. Chirsov/

RUSSIAN, for, Vysokomolokulyarnye Soyedineniya,
Vol. IV, 1961, pp 683-689.

REL N 8940

ATS 63-229,342

Sel - Chirsov
May 63

Kargin, V. A., Sogolova, T. L., and Pavlichenko, N. P.
RELAXATION EFFECTS IN CRYSTALLINE POLY-
OLEFINS. [1963] 5p. 8 refs.
Order from OTS or SLA \$1.10

63-14311

63-14311

I. Kargin, V. A.
II. Sogolova, T. L.
III. Pavlichenko, N. P.

Tranz. of Vsesoyuznaya Nauchno-Issledovaniya (USSR)
1962, v. 4 [no. 5] p. 738-742.

DESCRIPTORS: *Polymers, *Ethylenes, *Propenes,
*Relaxation time, Crystallization, Transition tem-
perature, Phase studies, Polyethylene plastics.

The relaxation properties of crystalline polyolefins
were investigated over a wide range of temperatures
under conditions of sinusoidal force action of constant
amplitude. Under such conditions the crystalline
polymers were found to possess a broad relaxation
spectrum over the entire interval from T_g to T_m . The
importance of determining the character of the
(Chemistry-Organic) TT, v. 16, no. 3) (over)

Office of Technical Services

New Method for the Preparation of Block
Copolymers, by Yu. G. Kuznetsov, Z. A. R
Tugovskii.

RUBENSTEIN, Isaac, Through Seedling, Vol. IX IV, No
5, 1962, pp 783-784.

ATE 101-3831

Sci-Chem
Due 62

244.876

Tager, A. A., Suvorova, A. I. and others.
 PLASTICIZATION OF POLY (METHYL METHACRY-
 LATE) WITH ESTERS OF DIPHENIC AND NAPHTHA-
 LIC ACIDS. Pt. 2 of Effect of the Chemical Structure
 and Size of Plasticizer Molecules on the Glass Tem-
 perature of Polymers. [1962] 7p.
 Order from ATS \$9.00

ATS-38P64H

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
 1962, v. 4, no. 6, p. 309-314.

DESCRIPTORS: *Plasticizers, Molecular structure,
 Phenyl radicals, Naphthyl radicals, Acids, Esters,
 *Acrylic resins, Hardening, Temperature.

(Materials--Plastics, IT, v. 9, no. 2)

63-12030

I. Tager, A. A.
 H. Suvorova, A. I.
 III. Title: Effect . . .
 IV. ATS-38P64H
 V. Associated Technical
 Services, Inc., East
 Orange, N. J.

Office of Technical Services

Studies of Chelate Polymers, Vol 5, Chelate
Polymers of Bis-dithiocarbamic Acids and
Metals, by A. P. Tarant'ev, et al.
RUSSIAN, per, Vysokomol. Soed., 1962,
Vol 4, No 6, pp 821-827.
NLI 7773.75 1964 (T-R-432) (On Loan)

Aug 65

287,145

CFST1 TT-64-11830

nitrogen-containing polymers with paramagnetic properties, by V. I. Mal'tsev.

RUSSIAN, Zhurav, Vymol. Soedin., Vol. 1 IV, No. 6, 1968, pp. 244-250.

AMS RI-504E

SECRET

SECRET

244,915

Dudina, L. A. and Enikolopyan, N. S.
INITIATION MECHANISM OF THE THERMAL DEGRADATION OF POLYMERS. [1962] 8p.
Order from ATS \$9.65

ATS-39P64R

Trans. of Vsesoyuznyi Nauchno-Issledovatskiy Tsentr Khimicheskoy Fiziki (USSR)
1962, v. 6, no. 6, p. 869-875.

DESCRIPTORS: *Polymers, Pyrolysis, Chemical reactions.

(Chemistry--Physical, TT, v. 9, no. 2)

63-12029

- I. Dudina, L. A.
- II. Enikolopyan, N. S.
- III. ATS-39P64R
- IV. Associated Technical Services, Inc.,
East Orange, N. J.

Office of Technical Services

63-12031

Korshak, V. V. and Smirnov, R. N.
CHANGE IN THE AGGREGATE STATE OF POLYMERS
ON MERCURATION. [1963] 5p.
Order from ATS 48, 25

ATS-40P(4R)

Trans. of Vysokomolekul'yarnye Soedin'eniya (USSR)
1962, v. 4, no. 6, p. 889-893.

DESCRIPTORS: "Polymers, Physical properties,
"Mercury.

I. Korshak, V. V.
II. Smirnov, R. N.
III. ATS-40P(4R)
IV. Associated Technical
Services, Inc., East
Orange, N. J.

(Chemistry--Physical, TT, v. 9, no. 2)

Office of Technical Services

63-12001

Tsvetkov, V. N.
SHAPE ASYMMETRY AND OPTICAL ANISOTROPY OF
SHORT MOLECULAR CHAINS. [1962] 8p.

Order from ATS \$12.00

ATS-41P64R

Trans. of Vysokomolekululyarnye Soedin[eniya]
(USSR) 1962, v. 4, no. 6, p. 894-900.

DESCRIPTORS: Stereochemistry, Molecular structure,
Optics.

I. Tsvetkov, V. N.
II. ATS-41P64R
III. Associated Technical
Services, Inc., East
Orange, N. J.

ATC - RS - 12500

(Chemistry - Organic, TT, v. 9, no. 2)

Office of Technical Services

Cooperative Phenomena in the Annealing and
Softening of PVA, by Yu. Sharonev, M.
Vol'kenshtein.

RUSSIAN, per, Vysokomolekul'nyye Soedineniya,
Vol. 4, No. 6, 1962, pp 917-921.
CSIRO/No.7648

Sol -
Aug 67

335-581

Molecular Ordering in Polymers, by D. N. Bort,
Yu. V. Ovchinnikov, et al, 8 pp.
RUSSIAN, par. Vysokomolekulyarnye Soedineniya,
Vol. IV, 19862, pp 985-939. 0225420
ABC-SC-T-64-1622

Sci-Phys
Dec 64

269,419

Korshak, V. V., Vinogradova, S. V., and
Valetskii, P. M.
MIXED POLYARYLATES FROM TEREPHTHALIC
ACID, DIHYDROXYDIPHENYL PROPANE, AND ALI-
PHATIC POLYHYDRIC ALCOHOLS. Pt. 37 of Hetero-
chain Polyesters. [1963] 8p.
Order form ATC \$10.50

ATS-50Q67B

Transl. of Vysokomolekululyarnye Soedineniya (USSR)
1962, v. 4, no. 7, p. 947-954.

DESCRIPTORS: Esters, Polymers, Synthesis,
Terephthalic acid, Hydroxides, Phenols, Phenyl
radicals, Propanes, Alcohols.

(Chemistry--Organic, T.I., v. 9, no. 9)

63-12822

1. Title: Heterochain
polymers
2. Title: Polyarylates
- I. Korshak, V. V.
- II. Vinogradova, S. V.
- III. Valetskii, P. M.
- IV. ATS-50Q67B
- V. Title: Heterochain...
- VI. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

63-12607

Entelis, S. G., Nesterov, O. V., and Bondareva, G. G.
INTERMOLECULAR POLYCONDENSATION OF PHTHALOYL
CHLORIDE WITH PIPERAZINE. [1963] 6p.
Order from ATS \$10.00 ATS-3Z66R

Trans. M. Mysokhniketskii [yarnye] Soedin[eniya] (USSR)
1962, v. 4, no. 2, p. 995-999.

DESCRIPTION: Pyrazines, *Chlorides, Condensation
reactions, Surfaces.

I. Entelis, S. G.
II. Nesterov, O. V.
III. Bondareva, G. G.
IV. ATS-3Z66R
V. Associated Technical
Services, Inc.,
East Orange, N. J.

475 AT-3Z66R

(Reproduction - Original, IT, v. 10, no. 2)

Office of Technical Services

63-17779

Milovskaya, E. B. and Dogopol'skaya, P. I.
THE ROLE OF AMIDES IN POLYMERIZATION USING
ZIEGLER CATALYSTS. [1963] 6p.
Order from ATS 58.00

ATS-58Q70R

Trans. of ~~International Academy of Sciences~~ (USSR)
1962, v. 4, no. 7, p. 1049-1052.

DESCRIPTORS: *Amides, *Polymerization, Catalysts,
Ziegler catalysts.

I. Milovskaya, E. B.
II. Dogopol'skaya, P. I.
III. ATS-58Q70R
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

475 RJ-3825

(Chemistry--Organic, TT, v. 10, no. 6)

Office of Technical Services

Andrianov, K. A. and Rumba, G. Ya.
THE CATALYTIC POLYMERIZATION OF HEXA-
METHYLCYCLOTRISILAZANE AND OCTAMETHYL-
CYCLOTETRASILAZANE. 28 Sep 62, 7p. 5 refs.
Order from DTIC or SLA \$1.10 63-10032

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
1962, v. 4, p. 1060-1063.

DESCRIPTORS: *Polymerization, *Methyl radicals,
*Silicon compounds, *Nitrogen compounds, Polymers,
Methane, Catalysis, Synthesis.

The reactions of hexamethylcyclotrisilazane and
octamethylcyclotetrasilazane in the presence of alkali
were studied, and it was shown that the reaction is
accompanied by the evolution of methane and formation
of "cyclobutane" polymers. Polymers with molecular
chains containing the Si-N-Si bond, with m. p. up to
500°C, and good solubility in benzene were synthesized.
(Author)

63-10032

I. Andrianov, K. A.
II. Rumba, G. Ya.

(Chemistry--Organic,
TT, v. 9, no. 12)
Office of Technical Services

Techniques of Obtaining and Evaluating the In-
formation of Films in Polarized Light, by N. V.
Mikhalev, N. V. Gribayev,

REKIZAM, per, Vychislitel'nyye Eosloneniya,
Vol. IV, No 8, 1962, pp 1152-1162.

II MIA. H 10014

Sol. - Phys
May 63

229,345

Preparation and Properties of Polyphenylene
Methyl Polymers. I. Synthesis of Polyarylene-
Methyl Polymers by Polycondensation of
Aromatic Hydrocarbons With Formaldehyde, by
A. A. Vainshteyn. 8 pp.

RUSSIAN, ger, Vysokomolekulyarnyye
Soedineniya, Vol. 12, No 8, 1968, pp 1178-1185.

ILL. Ref: 5829.4 1968 (10105)
(Loan)

Recd
Jul 68

ATS AT-325
61P65R

238,382

Mikhailov, N. V., Tokareva, L. G. and others.
THE PROBLEM OF STABILIZING POLY(ETHYLENE
TEREPHTHALATE) MELTS. [1961] 9p.
Order from ATS 513.25

ATS-84068R

Trans. of ~~Vysokomolekulyarnaya Khimiya~~ [Sovetskaya] (USSR)
1962, v. 4, no. 8, p. 1186-1192.

DESCRIPTIONS: Polyethylene plastics. Stability.
Phthalates.

63-17461

1. Title: Polyethylene
terephthalate

I. Mikhailov, N. V.

II. Tokareva, L. G.

III. ATS-84068R

IV. Associated Technical
Services, Inc.,
East Orange, N. J.

(Materials--Plastics, IT, v. 10, no. 6)

Office of Technical Services

R.P.R. Study of the Radiation Vulcanization
of Rubber in the Presence of Sulfur and
Hexachloroethane, by Z. M. Turanova.

RUSSIAN, per, Vysokomol Soedin, Vol 4, No 8,
1962, pp 1204-1208.
Chem Trans Sv 2804

346,335

Sol - Materials
May 67

65-1745

Perlov, K. A., Niz'manov, B. E., and
 Novoselov, N. D.
 SYNTHESIS OF POLYHOSPHONATES BY
 TRANSFERRED CATION OF ARYL PHOSPHONATES
 WITH GeCl_4 . Pt. 4 [of] Phosphorus-Containing
 Polymers. [1965] 6p.
 Order from ATIS 85 20

ATIS-85Q68R

Trans. of Vysokomolekul'yarnye Soedineniya (USSR)
 1962, no. 6, p. 1214-1218.

DESCRIPORS: Esterification, Synthesis (Chem-
 istry), Phosphorus, Polymers.

1. Title: Polyphosphonates
2. Title: Aryl phosphonates
1. Perlov, K. A.
2. Niz'manov, B. E.
3. Novoselov, N. D.
4. ATIS-85Q68R
5. Title: Phosphonates
6. Abstract: International
 Chemical Index
 Entry range: 65-1745

ATIS RT-3843

(Chemistry) - Organic, TT, v. 10, no. 6)

Approved for Release

Petrov, K. A., Nifant'ev, E. E., and others.
SYNTHESIS OF POLYPHOSPHITES AND
POLYPHOSPHONITES FROM GLYCERAL AND
PENTAERYTHRITOL. PT. 5 [of] Phosphorus-
Containing Polymers. [1963] 5p.
Order from ATS \$7.50

ATS-86Q68R

Trans. of Vysokomolekul (yarnye) Soedin(eniya)
(USSR), 1962, v. 4, no. 8, p. 1219-1222.

DESCRIPTORS: PETN, Phosphites, Synthesis
(Chemistry), *Phosphorus, *Polymers.

63-17464

63-16281

1. Title: Polyphosphonites
2. Title: Glycerol
3. Title: Polyphosphites
1. Petrov, K. A.
- II. Nifant'ev, E. E.
- III. Title: Phosphorus...
- IV. ATS-86Q68R
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS 86-3244
ATS 63-16281

(Chemistry-Organic, ET, v. 10, no. 6)

Synthesis of Graft Copolymers, by
V. V. Korshak.
RUSSIAN, per, Vysokomolekularnye
Soedineniya, Vol 4, No 10, 1962,
pp 1469-1473
NTG 72-12393-111

July 72

Kinetics of Reactions of Saturated
Hydrocarbon Polymers Initiated by
Peroxides, by R. Rado.

RUSSIAN, per, Vysokomolekulyarnye
Soedineniya, Vol 4, No 11, 1962,
pp 1746-1751.

DOC 72-11753-070

May 1963

POLYMER SCIENCE USSR, 1962, VOL. 4, NO. 3,
P. 397-600. Sup 62, 1v.
Order from ISI \$140.00/year (single articles available)

TT-63-22211-3

J. Pergamon Press, Inc.,
New York

Transl. of Vysshemolodnyye Soudinenniya (USSR)
1962, v. 4, no. 9, p. 1303-1309, 1314-1332, 1338-1341;
1354-1374, 1380-1384, 1390-1393; no. 10, p. 1486-
1502, 1515-1517, 1523-1536; no. 11, p. 1654-1671,
1682-1685, 1739-1745; no. 12, p. 1770-1783,
1796-1798, 1806-1811, 1822-1838. Abstracts are
included of selected articles from v. 4, no. 11-v. 5,
no. 2.

Other translations are available elsewhere.

Separate entries have been prepared for the individual
articles included in this issue.

DESCRIPTORS: *Polymers, Chemistry

(Chemistry--General, TT, v. 11, no. 1)

Office of Technical Services

Vanshek, V. A., Melnikova, E. P., and Gladkovskii, G. A.
 THE PREPARATION AND PROPERTIES OF POLYMERS OF THE TYPE OF POLYPHENYLENEMETHYL.
 II. THE PREPARATION OF POLYPHENYLENEMETHYL BY POLYCONDENSATION OF AROMATIC HYDROCARBONS WITH THEIR bis-ACETOXY AND bis-CHLOROMETHYL DERIVATIVES, Sep 63, 8p 4refs
 Order from IP \$14.00/year in Polymer Science USSR, v. 4, no. 3, p. 397-404

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 9, p. 1303-1309. (Abstract available)

DESCRIPTION: *Phenolic plastics, Preparation, *Benzene derivatives, Toluyl radicals, Methyl radicals, *Tolene, Alkoxy radicals, Chlorides, Polymerization, Condensation reactions, Physical properties.

(Materials--Plastics, TT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 397-404)

1. Title: Durene
2. Title: Polyarylene-methyl
1. Vanshek, V. A.
- II. Melnikova, E. P.
- III. Gladkovskii, G. A.
- IV. Title: Preparation.

Office of Technical Services

Bartenev, G. M. and Vlahutskaya, L. A.
COMPARISON OF VARIOUS EQUATIONS FOR THE
DEFORMATION OF NETWORK POLYMERS WITH
EXPERIMENT. Sep 63, 11p 30reds
Order from PF \$140.00/year In Polymer Science USSR,
v. 4, no. 3, p. 404-414

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 9, p. 1324-1332.

DESCRIPTORS: *Polymers, *Vulcanizates, *Rubber,
*Synthetic rubber, Deformation, Elasticity, Rupture,
Equations.

(Materials--Rubber, TT, v. 11, no. 1)

TT-63-22211-3 (p. 404-414)

I. Bartenev, G. M.
II. Vlahutskaya, L. A.

Office of Technical Services

TT-63-22211-3 (p. 414-421)

Kovalevskaya, R. N., Tinyakova, E. I., and
Dolgoplosk, B. A.

A STUDY OF HETEROGENEOUS CATALYST SYSTEMS BASED ON COBALT OXIDES AND SALTS AND ORGANO-ALUMINUM COMPOUNDS. Sep 63, 8p 15refs

Order form PP \$140.00/year in Polymer Science USSR, v. 4, no. 3, p. 414-421

Trans. of Vysokomolekululyarnye Soedineniya (USSR) 1962, v. 4, no. 9, p. 1338-1344. Abstract available

DESCRIPTORS: *Ziegler catalysts, *Cobalt catalysts, Oxides, Salts, *Aluminum compounds, Alkyl radicals, Ethyl radicals, Halides, Dienes, *Butadienes, Polymerization, *Ethylene, *Ethylene, Complex compounds

(Chemistry--Organic, TT, v. 11, no. 1)

(over)

Office of Technical Services

Studies in Polymer Synthesis. Part 7.
Photochemical Activation of a Polyester-
Acrylate Oligomer by the Visible Region of
the Spectrum, by G. P. Gladyshev, S. R.
Pavlovich.

RUSSIAN, part, Vysok. Speedr, Vol. IV, No. 9,
1962, pp. 1352-1353.

AMR 10-3833

Sol.-Chem
Dec 63

44, 877

TT-63-22211-5 (p. 422-429)

Golubenkov, L. L., Shubadish, A. N., Nikonova, S. N., and Akutin, M. S.
 THE GRAFTING OF POLYMERS TO SOLID SURFACES. I. AN INFRARED STUDY OF THE INTERACTION OF ORGANOSILICON COMPOUNDS AND GLASS. Sep 63, 8p. 16 refs.
 Order from PP \$140.00/year in Polymer Science USSR, v. 4, no. 3, p. 422-429

I. Title: Trimethylchlorosilane
 II. Abstracts: 1. I. Golubenkov, A. N. Shubadish, S. N. Nikonova, M. S. Akutin, 1963, 8p.
 V. Title: Infrared...

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 9, p. 1354-1360. (Abstract available)

DESCRIPTORS: *Composite materials, *Glass textiles, *Binders, *Silanes, Methyl radicals, Chlorides, Plastics, Chemical bonds, Infrared spectroscopy.

When the microporous glass is treated with trimethylchlorosilane a stable chemical bond is formed that is (Materials -- Adhesives, TT, v. 11, no. 1) (over)

Bakalo, L. A., Krentsel', B. A., and Topchlev, A. V.
 POLYMERIZATION OF SOME ORGANIC OXIDES. I.
 POLYMERIZATION OF EPICHLOROHYDRIN. Sep 63,
 8p 11refs
 Order form PP \$140.00/year in Polymer Science USSR,
 v. 4, no. 3, p. 429-435

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
 1962, v. 4, no. 9, p. 1361-1365. (Abstracted from)

DESCRIPTORS: *Epoxy plastics, *Halohydrins,
 Polymerization, *Catalysts, *Iron catalysts, Chlorides,
 Propene, Oxides.

A study has made of the polymerization of epichloro-
 hydrin by a number of ionic catalytic systems. It is
 shown that the $FeCl_3$ -propylene oxide complex
 catalyst can be used to produce polyepichlorohydrin
 of regular structure in good yield. The yield
 (Materials-Plastics, IT, v. 11, no. 3) (over)

TF-63-22711-3 (p. 429-435)

1. Title: Epichlorohydrin
2. Title: Polyepichlorohydrin
1. Bakalo, L. A.
- II. Krentsel', B. A.
- III. Topchlev, A. V.
- IV. Title: Polymerization...

Order of Technical Service

Mitsengeller, S. P., Andreeva, G. A., Sokolova, K. L., and Korotkov, A. A.

THE SYNTHESIS OF GRAFT COPOLYMERS BY THE ACTION OF POLYMERIC ORGANOMETALLIC COMPOUNDS ON POLAR POLYMERS AND A STUDY OF THEIR PROPERTIES. I. STYRENE-METHYL METHACRYLATE GRAFT COPOLYMERS. Sep 62, 10p refs

Order form 10-11-62, 00/year in Polymer Science USSR, v. 4, no. 3, p. 436-445

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 3, p. 1366-1374. (Abstracts in Russian)

DESCRIPTORS: *Graft polymers, *Styrene plastic, *Acrylic resins, Copolymerization, Catalysts, *Metalorganic compounds, Styrenes, *Lithium compounds.

(Category II - Russian, TT, v. 11, no. 1)

(over)

TT-63-22211-3 (p. 436-445)

I. Mitsengeller, S. P.
II. Andreeva, G. A.
III. Sokolova, K. L.
IV. Korotkov, A. A.
V. Title: Styrene-Methyl...

Order form 10-11-62, 00/year

Ermolina, A. V., Igorn, L. A., and Kargin, V. A.
 A STUDY OF THE RELATIONSHIP BETWEEN
 PHYSICO-MECHANICAL PROPERTIES AND THE
 NATURE OF THE SECONDARY STRUCTURES IN
 CRYSTALLINE POLYMERS. II. A PHOTOMICRO-
 GRAPHIC STUDY OF LAMELLAR STRUCTURES
 IN POLYAMIDE 66. IN BULL. Sep 63, 7p 12refs
 Order from IT \$140.00/year in Polymer Science USSR,
 v. 4, no. 3, p. 446-452.

Trans. of Vysokomolekuljarnya Soedineniya (USSR)
 1962, v. 4, no. 9, p. 1380-1384. (Abstract available)

DESCRIPTION: Polyamide plastic, Physical prop-
 erties, Mechanical properties, Microstructure,
 Strength, Photomicrography.

By means of the etching method a study has been made
 of the secondary structures of Polyamide 66 in relation
 (Material--Plastic, TT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 446-452)

- I. Ermolina, A. V.
- II. Igorn, L. A.
- III. Kargin, V. A.
- IV. Title: Photomicrographic...

Order of Technical Services

63-12815

Lipatova, T. E., Radnikova, V. A., and Lipatov, Yu. S.
THE INTERACTION OF POLYMERS WITH FILLERS.
PT. 5. EFFECT OF THE CONDITIONS OF POLYMER APPLICATION TO GLASS FIBERS AND OF THE TREATMENT OF GLASS FIBERS ON THE POLYMER PROPERTIES. [1963] 7p.
Order from ATS \$12.00

ATS-56166R

Trans. of Vysokomolekulyarnyye Soedineniya (USSR)
1962, v. 4, no. 9, p. 1398-1403.

DESCRIPTORS: *Glass textiles, *Polymers, Additives.

(Materials-Textiles, TT, v. 9, no. 12)

I. Lipatova, T. E.
II. Radnikova, V. A.
III. Lipatov, Yu. S.
IV. ATS-56166R
V. Associated Technical Services, Inc.,
East Orange, N. J.
VI. Title: Glass...

AT-72.5

Office of Technical Services

63-18927

Korolev, A. Ya., Bek, V. L., and Grishin, N. A.
ADHESION OF POLYTETRAFLUOROETHYLENE TO
METALS. [1963] [12p. 8 refs.
Order from CTS or SLA \$1.60

63-18927

Trans. of Vysokomolekulyarny Soedineniya (USSR)
1962, v. 4, no. 9, p. 1412-1418.

DESCRIPTORS: Adhesion, *Fluorides, *Ethylenes,
Polymers, Metals, *Adhesives, Joints, Steel, Stainless
steel, Mechanical properties.

It is shown that Ftoroplast-4, which has several
valuable physico-technical and chemical properties,
can be used as a glue for metals. Gluing is effected by
heating under pressure metal specimens with an inter-
layer of Ftoroplast to temperatures exceeding the
melting point of the crystallites in the polymer and
then cooling the specimens. It is shown that the peel
(Materials--Adhesives, TT, v. 10, no. 11) (over)

1. Title: Polytetrafluoro-
ethylene
2. Title: Ftoroplast-4
- I. Korolev, A. Ya.
- II. Bek, V. L.
- III. Grishin, N. A.

~~SECRET~~
~~CONFIDENTIAL~~
~~TOP SECRET~~

Office of Technical Services

Synthesis of Graft Copolymers, D.,
by V. V. Korshak.
RUSSIAN, part, Vysokomolekul. Soedin, Vol 4,
No 10, 1962, pp 1765-1773.
Chem Trans Br 3139

Sci - Chemistry
Apr 67

324,643

Zelenov, Yu. V.

THE RELATIONSHIP BETWEEN THE STRUCTURE
AND DYNAMIC PROPERTIES OF RUBBER-LIKE
NETWORK POLYMERS OVER A WIDE RANGE OF
TEMPERATURES. 10p 63, 10p 13refs
Order from IT \$142.00/year in Polymer Science USSR,
v. 4, no. 3, p. 457-466

TT-63-22211-3 (p. 457-466)

I. Zelenov, Yu. V.

Trans. of Vysokomolekululyarnye Soedineniya (USSR)
1962, v. 4, no. 10, p. 1486-1494.

DESCRIPTORS: Polymers, *Rubber, *Synthetic
rubber, Mechanical properties, Elasticity, Molecular
structure, Thermodynamics.

Materials--Rubber, TT, v. 11, no. 1)

Office of Technical Services

Razuvaev, G. A., Minsker, K. S., and Fedoseeva, G. T.

THE HETEROGENEOUS CATALYTIC POLYMERIZATION OF ETHYLENE IN THE PRESENCE OF $TiCl_3 \cdot Al_2Cl_6$ AND $TiCl_3 \cdot AlHCl_2$. Sep 63, 10p 13 refs.

Order from PP \$1.40/50/year In Polymer Science USSR, v. 4, no. 3, p. 467-476

Transl. of Vyssheshchekolymarnye Soedineniya (USSR) 1962, v. 4, no. 10, p. 1495-1502. (Abstract available)

DESCRIPTORS: *Polyethylene plastic, *Ethylenes, Polymerization, *Catalysts, *Titanium compounds, *Aluminum compounds, Chlorides, Hydrochloric acid, Solvents.

A study was made of the polymerization of ethylene in the presence of the heterogeneous catalytic systems (Materials--Minsker, TT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 467-476)

I. Razuvaev, G. A.
II. Minsker, K. S.
III. Fedoseeva, G. T.

U.S. GOVERNMENT PRINTING OFFICE

Matsuyan, S. G., Elyan, M. A., and
 Gevorgyan, E. Ts.
 STUDIES IN CYCLIC POLYMERIZATION AND
 COPOLYMERIZATION. X. A STUDY OF THE
 ABILITY OF SOME ALIPHATIC DIVINYLAETALS
 TO UNDERGO CYCLIC POLYMERIZATION. Sep 63.
 6p 7ref.
 Order from PP 5-60, 00/year in Polymer Science USSR,
 P. 1, 11, 1, p. 470-481.

TT-63-22211-2 (p. 476-481)

I. Matsuyan, S. G.
 II. Elyan, M. A.
 III. Gevorgyan, E. Ts.
 IV. Title: Study...

Trans. of Vysokomolekul'nyye Soedineniya (USSR)
 1962, v. 4, no. 10, p. 1515-1519. (Abstract available)

DESCRIPTION: Acetal plastics; Aliphatic compounds.
 *Vinyl compounds; Aldehydes; Acetals; Polymerization.

Divinylacetone, divinylacetone, divinyl-2-methoxy-
 propanal, divinyl-2-ethoxypropanal, divinyl-2-n-
 propoxypropanal, divinyl-3-(1-chloro-ethyl)propanal
 (Materials-Plastics, TT, v. 11, no. 1) (over)

Korolev, G. V., Berlin, A. A., and Kefeli, T. Ya.
POLYMERIZATION IN HIGHLY VISCOUS MEDIA
AND THREE-DIMENSIONAL POLYMERIZATION. II.
THE INITIAL STAGE OF POLYMERIZATION OF
POLYESTER-ACRYLATES. Sep 63, 2p. 11 refs.
Order from IR: \$140.00/year in Polymer Science USSR,
v. 4, no. 5, p. 482-490

Trans. of Vyssheshchekulynnye Soedineniya (USSR)
1962, v. 4, no. 10, p. 1520-1527. (Abstract available)

DESCRIPTORS: *Acrylic resins, Acrylic acid esters,
*Polymerization, Reaction kinetics, *Catalysts,
Carboxites, Degradation.

The initial rate, w_0 , of polymerization (initiated by
dicyclohexylphosphorocarbonate) of polyester-acrylate
oligomers was measured by the thermometric method
at 50°. The oligomers differed in the length and nature
(Chemistry-Physics), IT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 482-490)

I. Korolev, G. V.
II. Berlin, A. A.
III. Kefeli, T. Ya.
IV. Title: Initial...

Office of Technical Services

63-16597

Lipatov, Yu. S.
[THE INTERACTION OF POLYMERS WITH FILLERS]
VI. CERTAIN RHEOLOGICAL CHARACTERISTICS OF
POLYMER SOLUTIONS IN THE PRESENCE OF
FILLERS. [1963] 118p. 12 refs.
Order from OTS or SLA \$1.60

I. Lipatov, Yu. S.
II. Title: Certain ...

63-16597

Trans. of Vsesoyuznoye Nauchnoye Issledovaniye (USSR)
1962, v. 6, no. 10, p. 1528-1536.

DESCRIPTORS: *Polyvinyl alcohol, *Styrene plastics,
*Polymers, *Fillers, Glass, Powders, Gelatin,
Viscosity.

The effect of additions of finely dispersed glass powder
on certain rheological characteristics was studied in
aqueous solutions of gelatin and polyvinyl alcohol and
for benzene solutions of polystyrene of relatively high
concentrations. It was found that the addition of the
(Materials--Plastics, TT, v. 10, no. 7) (over)

Office of Technical Services

Synthesis of Graft Copolymers. 10. The Grafting
of Styrene onto Polyethyleneterephthalate
(Larsen). 11. The Grafting of Vinyl Monomers
onto Silk and Wool, by V. Korshak
RUSSIAN, per, Vysokomolekulyarnya Soedineniya.
Vol. 1, No. 11, 1962, pp 1625-1638
CSIRO/No. 6907

Sch. 1
Aug 67

335
300-292

Chemical Reactions of Polymers. VIII. Degradation
of Polyhexamethylene Adipamide at High Temperatures,
by S. N. Fedorov.

RUSSIAN, part, Vysokomol. Soedin., Vol IV, No 11,
1962, pp 1613-1615.

NLL Ref: 5828.4 1963 (16 382)
(Loan)

Sci - M/T
Oct 63

Shilov, A. E., Shilova, A. K., and Bobkov, B. N.
 REACTION OF α -OLEFINS WITH SOLUBLE COM-
 PLEX CATALYSTS OF THE ZIEGLER TYPE AND
 THE INITIATION MECHANISM OF ETHYLENE POLY-
 MERIZATION. [1963] [19p] 11 refs.
 Order from OTS, SLA, or ETC \$1.00 TT-64-14361

TT-64-14361

I. Shilov, A. E.
 II. Shilova, A. K.
 III. Bobkov, B. N.

Trans. of Vsesoyuznoye Khimicheskoye Nauchnoye Issledovaniye (USSR)
 1963, v. 4 [no. 11] p. 1688-1695. (Abstract available)

Other translations are available from ATS \$12.75 in
 ATS-55067R [1963] 9p and from PP \$140.00/year in
 Polymer Science USSR, v. 4, no. 3, p. 526-535.

DESCRIPTORS: *Polyethylene plastic, Preparation,
 Alkenes, Ethylenes, Polymerization, *Metalorganic
 compounds, *Ziegler catalysts, *Titanium compounds,
 *Aluminum compounds, Chlorides.

(Chemical Abstracts, TT, v. 11, no. 11)

Office of Technical Services

63-17455

Shilov, A. E., Shilova, A. K., and Bobkov, B. N.
 REACTION OF α -OLEFINS WITH SOLUBLE
 ZIEGLER-TYPE COMPLEX CATALYSTS AND
 THE INITIATION MECHANISM OF ETHYLENE
 POLYMERIZATION. [1968] 9p.
 Order from ATS \$12.75 ATS-65Q67R

Trans. of Vsesoyuznoye Nauchnoye Issledovaniye (VNIIS)
 1962, v. 6, no. 11, p. 1694-1695.

DESCRIPTORS: Ethylenes, Polymerization,
 *Catalysts, Solubility, Chemical reactions,
 Ziegler catalysts.

I. Shilov, A. E.
 II. Shilova, A. K.
 III. Bobkov, B. N.
 IV. ATS-65Q67R
 V. Associated Technical
 Services, Inc.,
 Reston, Virginia

ATS RT-3224

PERMISSION TRACK

(Chemistry--Organic, TT, v. 10, no. 6)

300-100-1000

63-2072

Shreiner, S. A., Zubov, P. I., and Volkova, T. A.
INTERNAL STRESSES IN EPOXY RESIN FILMS.

[1963] [p. 8 refs]

Order from OTS or SLA \$1.10

63-2072

I. Shreiner, S. A.
II. Zubov, P. I.
III. Volkova, T. A.

Trans. of Vysokomolekulyarnaya Soedineniya (USSR)
1962, vol. 4 [no. 11] p. 1714-1717.

DESCRIPTIONS: Epoxy plastics, Thermal stresses,
Plastic films, Hardening.

The increase and relaxation of stresses in epoxy resin
EPO-5 films in relation to their hardening temperature
was investigated by a visual optical method. Thermal
stresses arise at elevated temperatures. The relaxa-
tion of these stresses proceeds according to Shvedov's
equation. The relaxation periods depend upon the
nature of the hardening agent, with films formed in
the presence of polyethylpolyamine, equal and non-
(Materials-Plastics, TT, v. 10, no. 10) (over)

Office of Technical Services

Mobility in Polyhalogenostyrene, by G. P. Mikhailov,
T. I. Borisova, FOR OFFICIAL USE ONLY/
USE ONLY
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, 1962, pp 1732-1738.
JIE T 3161

Lib Tr 1057

Jun 64

RAE Tr 1057

VLL Ref 5209 1964 (1057)
(copy copy)

Korshak, V. V., Frenze, T. M., and Krasnyanskaya, E. A.
 HETEROCHAIN POLYAMIDES. XXXI. EFFECT OF THE CYCLIZING CAPACITY OF MONOMERS ON THE POLYMER CHAIN TERMINATION PROCESS. [1963] (Dp (figs formula omitted) 13 refs)
 Order from CTS, SIA, or ETC \$1.10 TT-63-20847

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 12, p. 1761-1769.

DESCRIPTORS: *Amides, *Polymers, *Polyamide plastics, Carboxylic acids, Amines, *Adipic acid, Polymerization, *Ethylene amines, *Succinic acid.

(See also TT-60-22673)

(Chemistry--Organic, TT, v. 11, no. 10)

TT-63-20847

- I. Title: Hetero-chain polymers
- I. Korshak, V. V.
- II. Frenze, T. M.
- III. Krasnyanskaya, E. A.
- IV. Title: Effect...

Office of Technical Services

TI-63-22211-3 (p. 543-582)

Sourinov, B. M., Enikolopyan, R. S., Bonetskaya, A. K., and Vexhibidi, V. V.

THE EFFECTS OF POLYMERIZATION OF LACTAM.

Order from PP \$100.00/year in Polymer Science USSR, v. 3, no. 11, p. 1445-1452.

1. Title: Lactamization.
2. Title: Polymerization.
3. Sourinov, B. M.
4. Enikolopyan, R. S.
5. Bonetskaya, A. K.
6. Vexhibidi, V. V.

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 11, p. 1770-1773. (Abstract available)

DESCRIPTION: Polymers, plastics, Lactams, Polymerization, Reaction kinetics, Phosphoric acid, Solubility compounds, Hydrides.

Experimental results are given from a study of the kinetics of polymerization of ϵ -caprolactam and γ -benzyl-L-glutamate at 230°C in the presence of (a) water, (b) water and phosphoric acid, and (c) water and NaOH . The general kinetic scheme of the polymerization (kinetics) is presented, TT, v. 11, no. 1. (order)

Enikolopyan, N. S., Bonetskaya, A. K., and Skuratov, S. M.
 THE INDUCTION PERIOD IN THE POLYMERIZATION OF ϵ -CAPROLACTAM AND ϵ -OENANTHOLACTAM UNDER VARIOUS CONDITIONS, Sep 63, 6p 3ref
 Order from PP \$140.00/year in Polymer Science USSR, v. 4, no. 3, p. 553-558

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 12, p. 1779-1781. (Abstract available)

DESCRIPTORS: *Polyamide plastics, *Lactams, Polymerization, Reaction kinetics.

The experimentally determined length of the induction period in the polymerization of ϵ -caprolactam and ϵ -oentanholactam is explained in terms of the basic kinetic scheme of the process proposed previously.

(Author)
 (Chemistry--Physical, TT, v. 11, no. 1)

TT-63-22211-3 (p. 553-558)

1. Title: ϵ -Caprolactam
 2. Title: ϵ -Oenanthalactam
- I. Enikolopyan, N. S.
 - II. Bonetskaya, A. K.
 - III. Skuratov, S. M.

Office of Technical Services

Studying Vulcanization of Fluoro-
Copolymers with Polymers by Infrared
Spectroscopy Method, by A. S. Novikov,
F. A. Galil-ov, 11 pp.
RUSSIAN, per, Vysokomol Soyed, Vol IV,
No 12, 1962, pp 1799-1804. 9699626
FTD-77-65-1371

Sci - Biol & Med Sci
Feb 66

296,351

62-17159

Dondachev, G. A. and Razaev, G. A.
REACTION OF BENZENECHROMIUM (0) WITH
ACRYLONITRILE AND THE MECHANISM OF POLY-
MERIZATION OF THE LATTER, [1963] 8p.
Order from ATS \$12.50 ATS-69048R

Trans. of Vysokomolekululyarnyye Soedineniya (USSR)
1962, v. 4, no. 12, p. 1872-1878.

DESCRIPTORS: *Benzenes, *Chromium, *Acrylonitriles
Chemical reactions, *Polymerization.

I. Dondachev, G. A.
II. Razaev, G. A.
III. ATS-59268R
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

475 AT-3222
Pergamon Press

(Chemistry--Organic, TT, v. 10, no. 1)

Office of Technical Services

TT-64-15285

Volokhina, A. V., Fabrichnyi, B. P., Shalavina, I. P.,
Goldfarb, Ya. L.
THE POLYMERIZATION OF CYTINYL AND
C-PROPYL SUBSTITUTED ORNANTHOLACTAMS.
[1961] [BNSL] T-1529, [NSR] NLJ 5110487.
[Date: 1961] [TSC] SLA, [ETC] \$1.00 TT-64-15285
Trans. of Physico-Mathematical Sciences (USSR)
1962, Vol. 4, no. 17, p. 157-163.

I. Volokhina, A. V.
II. Fabrichnyi, B. P.
III. Shalavina, I. P.
IV. Goldfarb, Ya. L.
V. BNSL T-1529
VI. NSR NLJ 5110487
VII. BNSL NLJ 5110487

[Chemistry] [Journal] Vol. 12, no. 20

Office of Technical Services

Razuvaev, G. A., Minsker, K. S., and Shapiro, I. Z.
COPOLYMERIZATION OF STYRENE WITH PROPYLENE IN THE PRESENCE OF A HETEROGENEOUS ZIEGLER-NATTA CATALYTIC SYSTEM. [1963] 6p.
Order from ATIS \$8.80 ATS-06Q69R

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 12, p. 1833-1835.

DESCRIPTORS: Copolymerization, Styrenes, Propenes, Catalysts, Ziegler catalysts.

63-17335

1. Title: Natta catalysts
- I. Razuvaev, G. A.
- II. Minsker, K. S.
- III. Shapiro, I. Z.
- IV. ATS-06Q69R
- V. Associated Technical Services, Inc., East Orange, N. J.

475 RJ-3821

(Chemistry--Physical, IT, v. 10, no. 5)

Office of Technical Services

63-22163

Kuleznev, V. N. and Igoshcheva, K. M.
A STUDY OF THE DENSITIES OF POLYMER
MIXTURES. [1962] 5p.

Order from ATS 58.25

ATS-600708

Trans. of Vysokomol. Soedineniya (USSR)
1962, v. 4, no. 11, p. 1859-1862.

DESCRIPTORS: *Mixtures, *Polymers, *Density.

I. Kuleznev, V. N.
H. Igoshcheva, K. M.
TEL. ATS-600708
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

Not to be used

(Chemistry) - Organic, TT, v. 10, no. 100

Office of Technical Services

Induced Electromotive Force and Electrical
Strength of Irradiated Polyvinyl Chloride,
by V. D. Kuchin, A. K. Shastova, 6 pp.

RUSSIAN, per, Vysokomol Soyedineniya, Vol IV,
No 12, 1962, pp 1863-1866.

CIA/FDD XX-1533
NO FOREIGN DISSEM

Sci - Elec
May 64
USIB Internal Use Only

Romanov, A. and Lazar, M.
 PREPARATION AND IDENTIFICATION OF
 ATACTIC POLYPROPYLENE-POLYSTYRENE
 GRAFT COPOLYMER. [1963] 6p.
 Order from ATS \$8.00

ATS-06069R

Trans. of Vysokomolekulyarnaya Soedineniya
 (USSR) 1962, v. 4, no. 12, p. 1867-1871.

DESCRIPTORS: Polymers, *Copolymerization,
 *Styrene plastics, *Propenes, Graft polymers.

(Chemistry--Organic, TT, v. 10, no. 7)

63-17360

1. Title: Atactic polymers
2. Title: Polypropylene-
 polystyrene
1. Romanov, A.
- II. Lazar, M.
- III. ATS-06069R
- IV. Associated Technical
 Services, Inc.,
 East Orange, N. J.

ATS RJ-3823

Office of Technical Services

Polymers Consisting of Aromatic Rings Conjugated
With Heteroatoms, by V. I. Nikitina, A.I. Makiakov.

9 p.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya;
Geterotsennyye Vysokomolekulyarnyye, 1963,

pp 87-98. 9700137

FTL-TT-OS-1355

Sci/Chemistry

May 66

301,086

Synergism of Antioxidants. II. Basic Effects
of the Action of Antioxidant Mixtures,

by N. S. Khlopchukina, 7 pp.

1955, por. Vsesoyuzn. Soderzheniya, Vol. V,
1955, pp. 195-199.

Ref. Ref. 3048.4 3048 (5397) (low)

073 77-6-3-20200

Sci. China

Pub. 60

248,616

63-20060
 Fedotova, D. Ya., Lisev, L. P., and Skripchenko, S.
 AN INVESTIGATION OF THE REACTION OF
 AROMATIC DIAMINES WITH DIISOCYANATES.

I. INFLUENCE OF CERTAIN FACTORS. [1963]

10p 7ref

Order from UFS of SLA \$1.20

63-20060

Trans. of Khimicheskoye Soudeniye (USSR)
 1963, v. 5, no. 2, pp. 4, 7-221-222.

DESCRIP: Carb. isocyanate plastics, *Isocyanates,
 Chemical reactions, Titration, Quantitative analysis,
 *Amines, Reaction kinetics, Benzene derivatives.

The results of the first stage of the study of the laws
 governing the reaction of diamines with diisocyanates,
 using the reaction of N,N' -diethyl-4,4'-biphenyl-
 diphenylmethane with 1,6-hexamethylene diisocyanate as
 an example are presented.
 (Organic Chemistry) TT, v. 10, no. 10

I. Fedotova, D. Ya.
 II. Lisev, L. P.
 III. Skripchenko, S. I.
 IV. Title unknown

Office of Technical Services

Pedotova, O. Ya., Losev, I. P., and Skripchenko, N. I.
AN INVESTIGATION OF THE REACTION OF AROMATIC DIAMINES WITH DIISOCYANATES. II. REACTIVITY OF SOME AROMATIC DIAMINES.
[1963] 11p. 11cm.
Order from CTS or SLA \$1.60

63-20061

Transl. of Vysokomolekulyarnye Soedineniya (USSR)
1963, v. 5, no. 2, p. 217-231.

DESCRIPTORS: Benzene derivatives, *Amines,
*Isocyanates, *Reaction kinetics, Alkyl radicals,
Substitution reactions, Isocyanate plastics, Quantitative
analysis

The results of the study of the relative reactivity of
4,4'-diaminodiphenylmethane, 4,4'-diaminodiphenyl
3,3'-diethylmethane, and their N-alkyl sub-
stitution products are presented. The reactivity of
(Chemistry--Organic, IT, v. 10, no. 9) (over)

63-20061

I. Pedotova, O. Ya.
II. Losev, I. P.
III. Skripchenko, N. I.
IV. Title: Reactivity . . .

Office of Technical Services

TT-64-10867

Maigel'dinov, I. A. and Tsyr, K. I.
THERMOMECHANICAL PROPERTIES OF CRYSTAL-
LINE POLYMERS. I. POLYPROPYLENE. [1964] [19p]

26 refs

Order from OIS, SLA, or ETC \$1.60 TT-64-10867

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1963, v. 5, no. 2, p. 243-251.
Another trans. is available from PP \$14.00/year in
Polymer Science USSR, v. 4, no. 4.

I. Maigel'dinov, I. A.
II. Tsyr, K. I.
III. Title: Polypropylene

(Physics--Solid State, TT, v. 11, no. 12)

Office of Technical Services

Gul, V. E., Zaborovskaya, E. E., Dontsova, E. P.,
and Babnova, B. G.
INVESTIGATIONS OF THE ADHESION OF THERMO-
SETTING POLYMERS TO GLASS (Issledovanie
Adhezii Termoreaktivnykh Polimerov k Shklu). [17p]
(foreign text included) 14re's
Order from OTS, IIA, or ETC \$1.60 TT-64-16528

Trans. of Vysokomolokulyarnaya Soedineniya (USSR)
1963, v. 5, no. 2, p. 269-273.

TT-64-16528

I. Gul, V. E.
II. Zaborovskaya, E. E.
III. Dontsova, E. P.
IV. Babnova, B. G.

(Materials--Ceramics, TT, v. 12, no. 4)

Office of Technical Services

ELECTROPHYSICAL
PREPARATION AND ELECTROCHEMICAL PROPERTIES OF SOME
POLY-SCHIFFBASES BY B. E. DAIYDOV, AND B. A.
KRENTSEL', AND ET AL, 5 PP.

RUSSIAN, PER, VYSOKOMOLEKULYARNYYE SOYEDINENIYA,
VOL. V, NO. 3, 1963, PP 321-324.

JPRS 11561

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ATS RT-3820

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240,642

Kron, A. K. and Ptitsyn, O. B.
STATISTICAL THEORY OF VOLUME EFFECTS IN
MACROMOLECULES. [1963] 7p. 1 rls.
Order from OTC, SIA, or ETC SIA, III TT-63-18697

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1963, v. 5, no. 3, p. 412-416.

DESCRIPTORS: *Polymers, Volume, Statistical analysis,
*Probability, Theory, *Thermodynamics.

A general statistical method is proposed for investi-
gating volume effects in polymer chains, in which the
free energy of the macromolecules is expressed
through the probability of segment collision in a par-
tially discharged chain. An approximate expression
for the expansion coefficient α of the chain was de-
rived on the basis of calculation of the collision proba-
bility for an effective gaussian chain. It was shown
(Chemistry-Physical, TT, v. 11, no. 1) (over)

TT-63-18697

I. Kron, A. K.
II. Ptitsyn, O. B.

Office of Technical Services

Rogovin, Z. A. and others.
SYNTHESIS OF NEW CELLULOSE AND OTHER
POLYSACCHARIDE DERIVATIVES. XXV. EFFECT OF
THE STRUCTURE OF ORGANOPHOSPHOROUS
DERIVATIVES OF CELLULOSE ON THE FIRE-
PROOFING OF CELLULOSIC MATERIALS. Communi-
cation no. 14 of Investigation of the Structure and Prop-
erties of Cellulose and its Derivatives. [1964] 10p
10 refs

Order from OIS, SLA, or ETC \$1.10 TT-64-10868

Trans. of Vysokomol[ekulyarnye] Soed[ineniya] (USSR)
1963, v. 5, no. 4, p. 506-511.

See also TT-64-15200

Chemistry--Organic, TT, v. 11, no. 12)

TT-64-10868

- I. Rogovin, Z. A.
- II. Title: Effect...
- III. Title: Investigation...

Office of Technical Services

Thermo-Oxidative Degradation and Stabilization
of Polyformaldehyde, by V. R. Alishoev,
M. B. Newaman, et al.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol V, No 5, 1963, pp 644-648.
X-11-13527-b

apr 67

325,172

Kovarskaya, B. M., Akulina, M. S., Sidnev, A. I.,
Yazviko, M. P., and Neiman, M. B.
STUDY OF THE THERMOOXIDATIVE DEGRADATION
OF POLYCARBONATE. [1964] 7p
Order from ATS \$7.50

ATS-76R74R

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
1963, v. 5, no. 3, p. 649-654.

(Chemistry--Organic, TT, v. 11, no. 12)

TT-64-12753

- I. Kovarskaya, B. M.
- II. Akulina, M. S.
- III. Sidnev, A. I.
- IV. Yazviko, M. P.
- V. Neiman, M. B.
- VI. ATS-76R74R
- VII. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Intrinsic Stability of Vinyl Chloride Polymer and
Copolymers, by B. I. Fedorayev,
RUSSIAN, per, Vysokomolekul Soedin, Vol 5, No 5,
1963, pp 659-662.
ATJ RI-5028

Sci-Chem
July 69

385,455

Galbraith, L. S. and Rogovin, Z. A.
SYNTHESIS OF NEW CELLULOSE AND OTHER
POLYSACCHARIDE DERIVATIVES. XVI. SYNTHESIS
OF CELLULOSE HYDROXAMIC AND ALGINOHYDROX-
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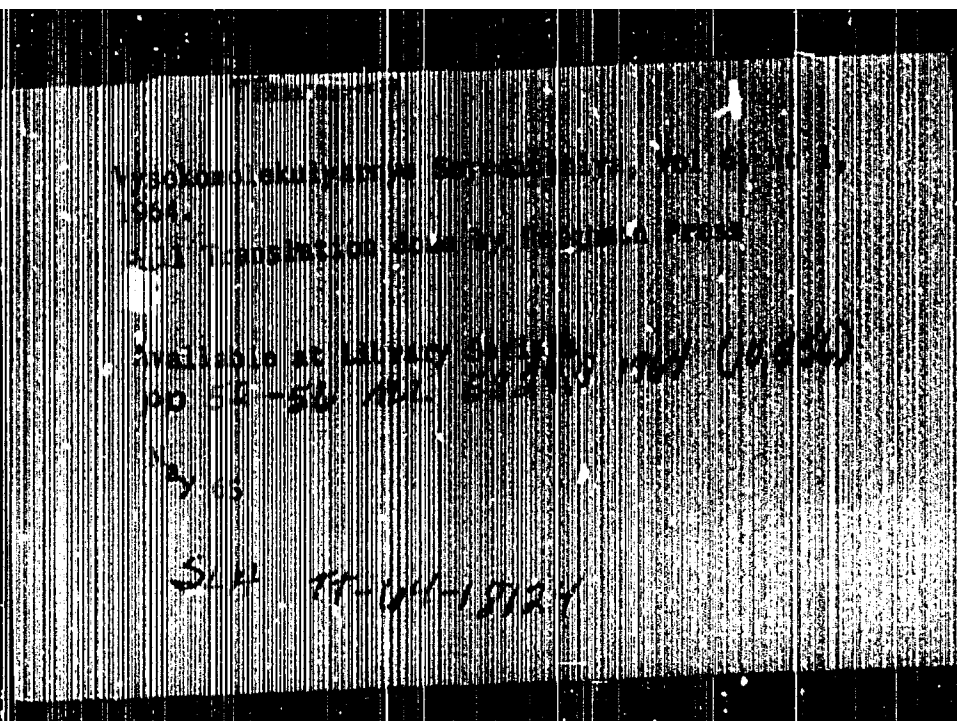
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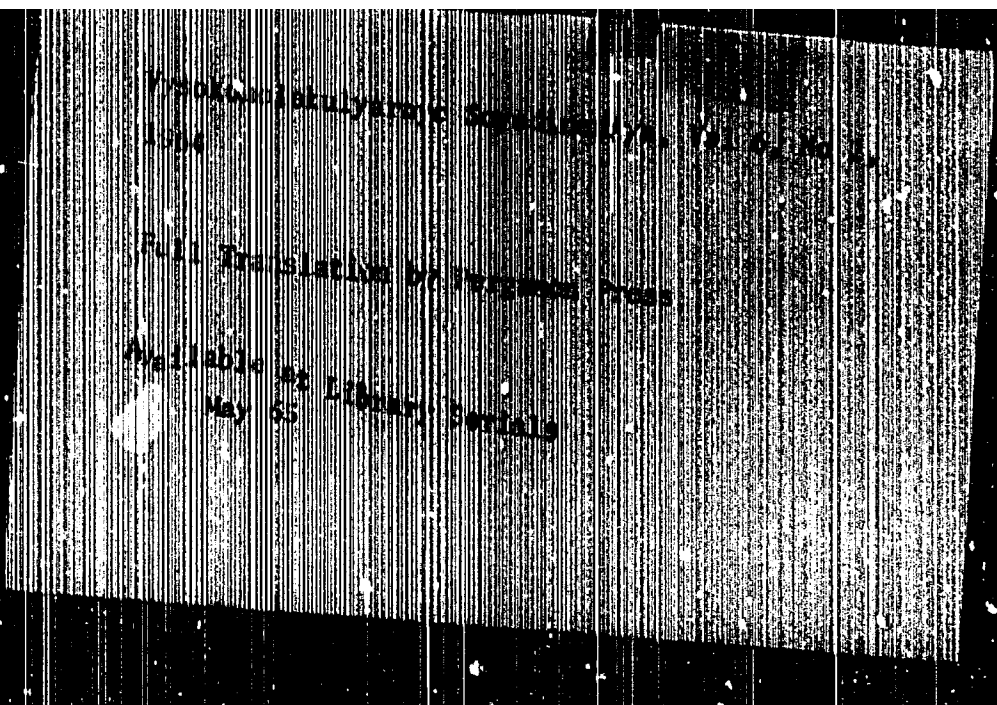
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